FACULTY PROFILE

| Name of the Staff | : Dr. KANNAN Y B |
|-------------------|---|
| Official Address | : Professor |
| | ARUMUGAM PILLAI SEETHAI AMMAL COLLEGE, |
| | VALLAL ARUMUGAM PILLAI ROAD, TIRUPPATTUR – 630 211. |
| Mobile | : 8870787042 |
| E-Mail Address | : phy6stud@gmail.com |



Personal Details:

| Age | : | 50 |
|----------------------|---|----------------|
| Date of Birth | : | 10/01/1974 |
| Sex & Marital Status | : | Male & Married |
| Citizenship | : | Indian |
| Department | : | PHYSICS |
| Date of Joining | : | 10/01/2008 |

Qualification:

| Degree | Programme and Specialization | Class/CGPA | Month & Year of Passing | Institute/University |
|--------|------------------------------|------------------|----------------------------|-------------------------------|
| Ph.D | Physics | Highly Commended | 09/2018 | Madurai Kamaraj University |
| M.Phil | Physics | First class | 05/2005 | Bharathidasan University |
| M.Sc | Physics | First class | 04/1997 | The Madura College |
| B.Sc | Physics | First Class | 04/1994 | MSS Wakf Board College |

Professional Experience:

Teaching Experience:

| Designation | lastituto/Llaivoroitu | Per | riod | Nature of Duties | |
|---------------------|--|------------|------------|------------------|--|
| Designation | Institute/University | From | То | Nature of Duties | |
| Associate Professor | Arumugam Pillai Seethai Ammal College | 10/01/2021 | | Teaching | |
| Assistant Professor | Arumugam Pillai Seethai Ammal College | 10/01/2008 | 09/01/2021 | Teaching | |
| Lecturer | SLS.MAVMM Ayira Vaisyar College | 09/09/1998 | 09/01/2008 | Teaching | |

Other Academic Credentials:

| S.No | Title |
|------|---|
| 1 | Certificate in Computing (CIC) - Indira Gandhi National Open University - 2001. |

Area of specialization:

| S.No | Title |
|------|------------------|
| 1 | Material Science |

Course Taught:

| S.No | Course Title | U.G. or P.G |
|------|---|-------------|
| 1 | Mechanics and Relativity, Thermal and Statistical Physics, Electricity, Magnetism and Electromagnetism, General Physics Practical – I,, Allied – I (Theory cum Practical), Allied– II (Theory cum Practical), Allied Practical – I,Optics and Spectroscopy, Atomic & Nuclear Physics, Allied Practical - II, Computer Programming in C, Communication Electronics, Elements of Theoretical Physics, General Physics Practical III, Electronics Practical-IV, Project, ES, NME, SBS | U.G |

H-Index:

| Research Gate | Google Scholar | Scopus | Web Of Science |
|---------------|----------------|--------|----------------|
| 4 | 4 | 4 | 4 |

Development or Training Activity:

Organized:

| C No | Dolo | Role Title | | riod | No. of | | Type of | |
|------|-------------|--|------------|------------|--------------|-------------|---------------------|--|
| S.No | Role | Tille | From | То | Participants | Course Type | Program | |
| 1 | Convener | Importance of nano structured thin film | 26/06/2020 | 26/06/2020 | 100 | | Mahinan | |
| | | cathode materials for lithium-ion battery applications | | | | | Webinar | |
| 2 | Convener(s) | RECENT TRENDS IN ENERGY MATERIALS" (RTEM – 2021) | 14/07/2021 | 15/07/2021 | 106 | | National Virtual | |
| 3 | Convener | Quantum theory of radiation | 08/06/2020 | 12/06/2020 | 72 | | e-Quiz | |

Attended:

| C No. | Title | Period | | Manua | | T |
|-------|--|------------|------------|--|-------------|-----------------|
| S.No | Title | From | То | Venue | Course Type | Type of program |
| 1 | International Workshop on Advanced Energy Materials (IWAEM – 2012) | 09/02/2012 | 10/02/2012 | Alagappa University, Karaikudi | | Workshop |
| 2 | Computational Physics | 30/08/2013 | 31/08/2013 | Madurai Kamaraj University, Madurai | | Workshop |

| <u></u> | | Period | | | о т | - , |
|---------|--|------------|------------|---|--------------------------|-----------------------------|
| S.No | Title | From | То | Venue | Course Type | Type of program |
| 3 | Current trends in Physics | 21/09/2014 | 21/09/2014 | Zakhir Hussain College, Ilanyakudi | | State level |
| 4 | NATINONAL CONFERENCE ON RECENT TRENDS IN ADANCED ENERGY MATERIALS | 10/03/2010 | 11/03/2010 | Alagappa University, Karaikudi | | National Conference |
| 5 | MATERIAL CHARACTERISATION TECHNIQUES | 22/12/2010 | 22/12/2010 | Madura College, Madurai | | State level |
| 6 | Plasma Physics | 24/02/2011 | 24/02/2011 | Thiagarajar College, Madurai | | State level |
| 7 | Intl conf on momentous role of nanomaterials in renewable energy devices (IC MNRE-2018) | 01/03/2018 | 02/03/2018 | Alagappa University, Karaikudi | | International Conference |
| 8 | National Seminar on Advanced Topics in Physics (NSATP – 19) | 06/03/2019 | 06/03/2019 | PG and Research Department of Physics, Jamal Mohamed College (Autonomous), Tiruchirappalli | | National Seminar |
| 9 | National Workshop on Theory and Practice of X-ray diffraction and Scanning electron microscope | 30/05/2019 | 31/05/2019 | Sethu Institute of Technology, Madurai | | National Workshop |
| 10 | Semiconductors, Surfaces, Alloys Modeling and Preparations (SSAMAP – 2019) | 06/12/2019 | 06/12/2019 | Sree Sevugan Annamalai College, Devakottai | | National Conference |
| 11 | 59th ORIENTATION Course | 16/12/2008 | 12/01/2009 | UGC – ACADEMIC STAFF COLLEGE, BHARATHIDAS EN UNIVERSITY, TRICHIRAPPAL LI | Orientation Programme | Offline mode |
| 12 | REFRESHER Course in Physics | 03/11/2009 | 23/11/2009 | UGC – ACADEMIC STAFF COLLEGE, MADURAI KAMARAJ UNIVERSITY | Refresher Course | Offline mode |
| 13 | Refresher course in Material Sciences | 12/07/2017 | 01/08/2017 | Kannur University, Kerala | Refresher Course | Offline mode |
| 14 | ARPIT - "Refresher course – Curriculum Design and e-content development" | 01/11/2018 | 28/02/2019 | Central University, Kerala - Online mode | Refresher Course | Online mode |

| | T '11 | Title | | Maria | 0 . | T |
|------|--|------------|------------|---|--|-----------------|
| S.No | Inte | From | То | Venue | Course Type | Type of program |
| 15 | Recent Trends in Physics for Energy and Environment (RTPEE – 2020) | 13/02/2020 | 26/02/2020 | UGC – ACADEMIC STAFF COLLEGE, MADURAI KAMARAJ UNIVERSITY | Refresher Course | Offline mode |
| 16 | Managing online classes and co- creating MOOCS | 20/04/2020 | 06/05/2020 | Teaching Learning centre, Ramanujan college, University of Delhi. | FDP | Online mode |
| 17 | Enhancing research effectiveness using Scopus, Science direct & Mendeley for faculties | 01/05/2020 | 01/05/2020 | Faculty development centre, Kurukshetra University, Kurukshetra | FDP | Online |
| 18 | Online Course Design, Development and Delivery | 29/05/2020 | 31/05/2020 | Human Resource Development Centre, University of Hyderabad | Professional Development Programme | Online mode |
| 19 | ADVANCED CONCEPTS FOR DEVELOPING MOOCS | 02/07/2020 | 17/07/2020 | Teaching Learning Centre and Research development and Services cell, Ramanujan college. | FDP | Online mode |
| 20 | Capacity Building Programme for faculty members and research scholars | 12/06/2020 | 23/06/2020 | Alagappa University | Professional Development Programme | Online mode |
| 21 | E-content development | 28/10/2018 | 24/12/2018 | SWAYAM | Professional Development Programme | Online mode |
| 22 | Nanotechnology, Science and Applications | 01/07/2019 | 01/09/2019 | NPTEL | Professional Development Programme | Online mode |
| 23 | Solar Photovoltaic Fundamentals Technology and Applications | 01/07/2019 | 01/09/2019 | NPTEL | Professional Development Programme | Online mode |
| 24 | Physics of Materials | 01/07/2019 | 01/10/2019 | NPTEL | Professional Development Programme | Online mode |
| 25 | Digital productivity and AI fluency | 28/08/2023 | 01/09/2023 | Naan Muthalvan | FDP | Online mode |

Expert Lecture Delivered/Judge:

| S.No | Title | Pei | riod | Venue | |
|-------|--|------------|------------|-------------------------------|--|
| 3.110 | The | From | То | venue | |
| 1 | Charge Particle – Electron | 04/03/2011 | 04/03/2011 | Ananda College, Devakottai | |
| 2 | Energy:- explore, harness and conserve | 27/07/2012 | 27/07/2012 | A.P.S.A.College | |

| C No. | Title | Period | | Manua | |
|-------|---|------------|------------|--|--|
| S.No | Title | From | То | Venue | |
| 3 | Weather and climate – society and culture. | 18/09/2015 | 18/09/2015 | A.P.S.A.College | |
| 4 | Science, Technology, Innovation for Sustainable Development" – Food and Agriculture | 26/07/2016 | 28/07/2016 | A.P.S.A.College | |
| 5 | Science, Technology, Innovation for Sustainable Development" – Food and Agriculture | 05/10/2017 | 06/10/2017 | A.P.S.A.College | |
| 6 | Fundamentals of Nano Science | 04/10/2017 | 04/10/2017 | Zakir Hussain College, Ilayangudi. | |
| 7 | Society, Culture and Livelihoods | 24/07/2018 | 26/07/2018 | A.P.S.A.College | |
| 8 | Society, Culture and Livelihoods | 30/07/2019 | 31/07/2019 | A.P.S.A.College | |
| 9 | Newton's Gravitation law | 07/10/2014 | 07/10/2014 | Senthamarai College, Madurai | |
| 10 | In-Service Training Program for Science Teachers through TNSCST (Phase – II) | 28/07/2022 | 28/07/2022 | Saradha College, Amaravathi Pudur, Karaikudi | |

Other Credentials:

| S.No | Title |
|------|--|
| 1 | Received appreciation certificate from TANSACS for organizing New India @75 competitions/activities as |
| 2 | Received appreciation certificate for organizing blood donation camp from Dean, Sivagangai Medical College and |
| 3 | Received appreciation certificate for organizing blood donation camp from Sivagangai District Collector, Ms.Asha |

Membership in Professional bodies:

| S.No | Name of the society | Grade of Membership |
|------|--|---------------------|
| 1 | THE INDIAN ASSOCIATION OF PHYSICS TEACHERS | Life Member |

Research Achievements:

International Journal Publications:

| S.No | Title of the Paper | Name of the Journal | Vol.No & Page No. | Month & Year | Current Status |
|------|---|---|-------------------|--------------|----------------|
| 1 | An experimental analysis of the correlation between electronic structure and room temperature magnetism in Cu?doped CoFe2O4spinel ferrite | Applied Physics A | 128 (8), 1-15 | 07/2022 | Published |
| 2 | Influence of Zn2+ Doping on CaFe2O4 Spinel Ferrites: An Analysis of Experimental Charge Density and Magnetism | Journal of superconductivity and novel magnetism | 35, 1281–1298 | 02/2022 | Published |
| 3 | Effect of Ca2+ doping on the electronic charge density and magnetic properties of ZnFe2O4 spinel ferrites | Journal of Materials Science: Materials in Electronics | 33, 4116–4131 | 01/2022 | Published |

| S.No | Title of the Paper | Name of the Journal | Vol.No & Page No. | Month & Year | Current Status |
|------|---|---|-----------------------------|--------------|----------------|
| 4 | Structural Rietveld Refinement of Nickel Ferrite Nanoparticles Prepared by Chemical Method | Journal of Nanoscience and Technology | Volume 5 Issue 2 655–657 | 04/2019 | Published |
| 5 | Effect of sintering on dieletric and AC conductivity properties of Ni0.5Zn0.5Fe2O4 nano ferrite particles. | Journal of the Australian ceramic society | 53(2), 577-581 | 05/2017 | Published |
| 6 | Structural, Magnetic, Optical, and MEM Studies on Co- precipitated X0.4Zn0.6Fe2O4 (X = Co, Mn) Nanoferrite Particles | Journal of Superconductivity and Novel Magnetism | 30(9), 2673-2682 | 03/2017 | Published |
| 7 | Structural, magnetic and optical characterization of Ni0.8Zn0.2Fe2O4 nano particles prepared by co- | Physica B | 502, 181-186 | 12/2016 | Published |
| 8 | Sintering effect on structural, magnetic and optical properties of Ni0.5Zn0.5Fe2O4 ferrite nano particles | Journal of Magnetism and Magnetic Materials, | 423, 217-225 | 02/2017 | Published |
| 9 | Study of various sites interactions using maximum entropy method on mechanically alloyed Ni0.5Zn0.5Fe2O4 nano ferrite particles sintered from 1100°C to 1400°C | Journal of Superconductivity and Novel Magnetism | 30(2), 407-419 | 09/2016 | Published |
| 10 | Synthesis and characterization of some ferrite nanoparticles prepared by co-precipitation method | Journal of Materials Science: Materials in Electronics | 27(11), 12000- 12008 | 07/2016 | Published |
| 11 | X-ray determination of charge transfer in solar grade GaAs | Journal of Physics and Chemistry of Solids | 69, 83-86 | 08/2007 | Published |

National Conference Publications:

| S.No | Title of the Paper | Name of the Conference | Organizer | Month & Year |
|------|--|---|---|--------------|
| 1 | Effect of low sintering temperature on Ni0.5Zn0.5Fe2O4 nano ferrite particles | National Web conference on Synthesis and Characterization of Novel Materials | PG & Research Department of Physics, Muthurangam Govt.Arts College,Vellore-632 | 07/2020 |
| 2 | Structural and magnetic properties of Ni0.4Zn0.6Fe2O4 prepared by co- precipitation method | National conference on Recent Trends in Solar Energy and Nanoscience (SENS – 2019) | Department of Physics & Chemistry, G.T.N. Arts College, Dindigul | 03/2019 |
| 3 | Dielectric and optical properties of Ni0.4Zn0.6Fe2O4 prepared by co- precipitation method | Recent Advances in Material Science (RAMS – 2019) | Department of Physics, G.T.N. Arts College, Dindigul | 03/2019 |
| 4 | "Bond strength analysis of zinc substituted cobalt ferrite nano particles prepared by co-precipitation method" | national seminar on new materials research and nanotechnology (NSNMRN – 2018) | Department of Physics, Sethupathy Government College | 03/2018 |
| 5 | "NANOFERRITE PARTICLES – A BOON TO PHARMACEUTICAL INDUSTRY". | National seminar on BioVision 2014 (Recent trends and future perspectives of biosciences) | Arumugam Pillai Seethai Ammal College, Tiruppattur | 09/2014 |
| 6 | ?????????????????????????????????????? | ???????? ??????? ????????????????????? | ????? ???????? ????? | 06/2011 |

International Conference Publications:

| S.No | Title of the Paper | Name of the Conference | Organizer | Month & Year |
|------|--|---|--|--------------|
| 1 | Synthesis and characterization of nickel zinc ferrite (Ni0.5Zn0.5Fe2O4) particles sintered at low temperatures | International conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES -2019) | Department of Physics, Alagappa University, Kraikudi | 09/2019 |

International Book Publishing:

| S.No | Title Of The Book | Name Of The Publisher | Туре | Year Of Publishing |
|------|---|--------------------------|---------------|--------------------|
| 1 | Synthesis and characterization of NiFe2O4 nano particles prepared by the chemical reaction method | Materials Research Forum | International | 2016 |

Project Guidance:

| Degree | Number of Projects |
|-----------|--------------------|
| UG Degree | 15 |

Other Contribution work to the Institute/Organization:

| S.No | Name | Dala | Pei | riod | Nature of Duties |
|-------|---------------------------------------|-------------------|------------|------------|--|
| 3.110 | Name | Role | From | То | Nature of Duties |
| 1 | Value Education | Member | 06/16/2009 | 31/05/2016 | Inculcating importance of value Edu. to Stud. |
| 2 | Examination Committee | Member | 06/16/2009 | 31/05/2013 | Conducting internal exams |
| 3 | Electronics Club and Photography Club | Member | 06/16/2009 | 31/05/2014 | creating interest in this fields |
| 4 | Canteen Committee | Member | 06/16/2010 | 31/05/2016 | To maintain Quality, Hygienic |
| 5 | Public relation and press committee | Member | 06/16/2014 | 31/05/2016 | communication to media |
| 6 | Red Ribbon club | Memner | 06/16/2016 | 31/05/2019 | HIV/AIDS awareness |
| 7 | Red Ribbon club | Convener | 06/17/2019 | 29/12/2022 | HIV/AIDS awareness |
| 8 | Eco club | Member | 06/16/2016 | 31/05/2018 | Maintain the ecology |
| 9 | Book purchase committee | Member | 06/16/2016 | 31/05/2018 | Purchasing books |
| 10 | Swachh Bharath | Member | 06/17/2018 | 31/05/2019 | cleanliness |
| 11 | MOOCs | Department mentor | 06/17/2019 | 31/05/2021 | Facilitate students |
| 12 | Career guidance and entry in service | Member | 06/16/2021 | 29/12/2022 | Facilitate students |

| S.No Name | Nama | | Period | | Nature of Duties |
|-----------|--|-------------|------------|------------|------------------------------|
| | Role | From | То | | |
| 13 | National Institution Ranking Framework | Co-convener | 06/16/2021 | 29/12/2022 | Facilitate in uploading data |